

**Draft Summary of the Environmental Work Group Meeting  
Oroville Facilities Relicensing (FERC Project No. 2100)  
September 24, 2003**

The Department of Water Resources (DWR) hosted a meeting for the Environmental Work Group (EWG) on September 24, 2003 in Oroville.

A summary of the discussion, decisions made, and action items are provided below. This summary is not intended to be a transcript, analysis of the meeting, or to indicate agreement or disagreement with any of the items summarized, except where expressly stated. The intent is to present a summary for interested parties who could not attend the meeting. The following are attachments to this summary:

Attachment 1	Meeting Agenda
Attachment 2	Meeting Attendees
Attachment 3	Narrative Report Guidance
Attachment 4	Revised Resource Action Tracking Matrix
Attachment 5	Draft Narrative Reports: EWG –2A
Attachment 6	Presentation on EWG-15A
Attachment 7	SP-T8, Project Effects on Non-Native Wildlife
Attachment 8	Presentation on SP-T8
Attachment 9	Draft Report, SP-F8: Transfer of Energy and Nutrients by Anadromous Fish Migration
Attachment 10	Summary of Revisions to the SP-F8 Technical Report
Attachment 11	Final Assessment of Potential Sturgeon Passage Impediments, SP-F3.2, Task 3A
Attachment 12	Progress Summary for SP-W1, Project Effects on Water Quality Designated Beneficial Uses for Surface Waters – Pathogens: Recreation Area Coliform Monitoring
Attachment 13	Progress Summary for SP-W1, Project Effects on Water Quality Designated Beneficial Uses for Surface Waters – Aquatic Toxicity
Attachment 14	Progress Summary for SP-W3, Recreational Facilities and Operations Effects on Water Quality
Attachment 15	Progress Summary for SP-W7, Land and Watershed Management
Attachment 16	Progress Summary for SP-W1, Project Effects on Water Quality Designated Beneficial Uses for Surface Waters – Water Quality: Upper Feather River

## **I. Introduction**

Attendees were welcomed to the EWG meeting. Attendees introduced themselves and their affiliations. The desired outcomes of the meeting were discussed as listed on the meeting agenda. The meeting agenda and list of meeting attendees are appended to this summary as Attachments 1 and 2, respectively.

## **II. Action Items – August 27, 2003 Environmental Work Group Meeting**

A summary of the August 27, 2003 EWG meeting is posted on the relicensing web site. The Facilitator reviewed the status of action items from that meeting as follows:

**Action Item #E104:** Describe why each resource action is categorized as 2, 3 or 4 in the comments section of matrix.

**Status:** Mike Manwaring with MWH reported that this task is in progress and the updated matrix reflects revisions in the comments section completed to date.

**Action Item #E105:** Define the contents and intent of the narrative reports.  
**Status:** See discussion below.

**Action Item #E106:** Confirm that resource actions categorized as 1 are ready to move forward to the Plenary Group and the PDEA Team for analysis.

**Status:** Terry Mills confirmed that the actions identified as '1' are correctly categorized.

### **III. PM&E Discussion**

#### *Narrative Report Contents*

Terry Mills distributed a narrative reports guidance document (Attachment 3) and reviewed the role of the work groups in providing a recommendation to the Plenary Group on which proposed resource actions should be moved forward for analysis. Mike Manwaring noted that the reports include a section for recommendations and Dave Olson with SWRI added that the reports are threshold documents designed to synthesize and summarize available information for the collaborative. Terry confirmed that narrative reports would be prepared for all of the EWG's Category 1 and 2 proposed resource actions. Other actions will be described in one-page summaries that will include why the action was not recommended. Woody Elliott representing the Department of Parks and Recreation (DPR) asked if the narrative reports will be made available on the project web site. He pointed out that while narrative reports discussed at the work group level would be included in the web posting of meeting summaries as attachments, narrative reports discussed at the task force level would not be posted. Terry Mills agreed to consider posting the draft narrative reports on the project web site.

Chuck Hanson representing the State Water Contractors supported the recommendation section of the narrative reports and suggested that another section might include identification of additional analyses or modeling needs. Terry noted that the collaborative would have an opportunity to review and comment on the narrative reports. The EWG agreed to add a footer indicating the date of last revision and whether the report has been discussed in the task force.

The EWG discussed how the proposed resource actions would be forwarded to the Plenary Group and how cross resource issues will be discussed. Terry Mills indicated a two-path process where technical aspects of cross resource issues would first be discussed in the work groups and while policy type issues are discussed at the Plenary level. Roger Masuda representing Butte County suggested the DWR RAMs discuss how to best get the proposed resource actions tracked and evaluated in the appropriate work groups. Chuck Hanson clarified that Category 1 means the proposed resource action has enough information to be forwarded, not that the action is prioritized for implementation. Tom Berliner representing the State Water Contractors added that the Plenary needs the EWG to provide recommendations on which technical choices are the best and will achieve the most benefit for the money because they are not equipped to make those types of technical decisions.

The EWG agreed that the narrative reports need to include recommendations and should identify those resource actions that are not only ready for review but also are considered a good idea. Tom Berliner suggested that the EWG represents the technical expertise in the collaborative and should put together the most viable package for the Plenary Group to discuss for policy conflicts. Roger Masuda added that the Plenary Group would serve as a conflict resolution and policy body. The Facilitator clarified that the work groups are reviewing the proposed resource actions and forwarding a recommendation to the Plenary Group and the PDEA development team. The Plenary Group will review cross-resource policy issues and the

PDEA team will develop alternatives by grouping various resource actions. She added that DWR is currently developing a database that merges all of the matrices under development by each of the work groups and will be searchable by keywords.

The Facilitator provided a brief update on the Plenary Group meeting held the preceding night. She described the discussions related to confidentiality during settlement negotiations and confidence in the ALP. The Plenary Group also discussed the status of the cumulative impact analysis and requested an update from the PDEA team. At the Plenary Group meeting, NOAA Fisheries indicated they are considering pulling out of the ALP process if they are not satisfied with the resolution of their cumulative impact analysis issues. Eric Theiss asked for a list of the PDEA team and inquired if the collaborative members are involved in the PDEA development process. Terry Mills indicated that the PDEA was a Department of Water Resources document developed by department and consulting staff. Eric indicated that NOAA Fisheries and DWR are planning to meet soon to discuss outstanding issues.

#### *Task Force Update*

Terry Mills summarized the efforts at the most recent task force meetings and informed the EWG that the Fisheries Task Force has completed their review of all fisheries proposed resource actions. The Terrestrial Task Force met on September 12 and completed their review. A Water Quality Task Force is scheduled for October 15 to review those actions related to water quality. Resource actions related to geomorphology will likely be discussed at the Water Quality Task Force meeting.

#### *Updated Tracking Matrix*

Mike Manwaring with MWH distributed an updated version of the tracking matrix (Attachment 4) containing recommendations from the Fisheries Task Force and asked the EWG to review and provide comments back to the Task Force. He explained that the matrix includes task force recommendations on which resource actions should move forward with the production of a narrative report but do not represent recommendations to implement an action. The EWG reviewed the matrix and provided several revisions. Ted Alvarez noted that a new resource action related to the restoration of Ruddy Creek would be added to the matrix. Eric Theiss affirmed that completion of a narrative report does not indicate closure and further investigation may be undertaken.

#### *Narrative Reports*

Brad Cavallo with DWR distributed a narrative report on EWG 2A (Attachment 5) designed to provide spatial segregation of salmon and steelhead runs by using one or more weirs placed in the Feather River. His presentation described the use of similar structures and design considerations for the Feather River. Eric Theiss suggested that if the amount of available habitat is known and a genetically viable population size is known, we could better site the weirs to take advantage of the relationship. The EWG discussed the potential for poaching, which is a problem at a counting station on the Mokelumne River. The EWG also discussed cost estimates based on a similar structure in place on the Stanislaus River including \$250 – 350K to install two weirs with an additional \$150K per year for two full-time technicians. The EWG discussed how the weir would work in conjunction with the hatchery operations and discussed social impacts and the potential for vandalism to require periodic replacement. It was noted that a collection facility or new fish ladder may be needed to get excluded fish to the hatchery. Chuck Hanson noted that this narrative report is a good example of identifying the interface between technical and policy aspects of a proposed resource action.

Dave Olson provided a presentation on EWG-15A (Attachment 6) and reminded the EWG that the narrative report was distributed at the June EWG meeting. EWG-15A involves changes in flow rates to encourage increased habitat utilization and decrease superimposition of salmon redds. The EWG discussed the role of gravel through-flow during spawning season and mortality rates from other California river systems. Dave noted that the increase in available habitat will be calculated from the PHABSIM results and gravel size will be considered. The EWG concluded that evaluation of this will depend on modeling and Dave reminded the EWG that PHABSIM has no temperature component so that information would need to come from other modeling efforts.

#### *Grouping Resource Actions*

Terry Mills introduced the concept of grouping resource actions to make efficient use of participants' time and to provide a programmatic look at the proposed resource actions. He described it as a way to provide DWR with flexibility and bring together diverse groups of activities. Several programs could be constructed with resource actions grouped within the programs. He acknowledged this is one strategy to arrive at an adaptive management program with flexibility for future actions. Chuck Hanson offered that the approach is consistent with how the matrix is evolving and it allows you to prioritize. Ron Davis representing the public noted that a packaged approach gives folks going into settlement a better way to manage their involvement. The EWG discussed grouping the resource actions by area and the need to consider how beneficial actions in one geographic area may be negatively impacting another geographic area. Terry suggested that DWR and the consulting team would prepare a sample of his concept by using the Oroville Wildlife Area and prepare a written description of the process followed to prepare the groupings. Chuck Hanson suggested that the sample consider identifying whether the actions involve capital construction or include operational actions. If hydrographs and temperature criteria are developed by area, the actions will be forced into groups and prioritized by their ability to meet the criteria. The output should help drive modeling effort to further refine the actions. Tom Berliner requested that the groupings consider how FERC typically approaches relicensing and is easily understood by the layperson.

#### *Next Steps*

The Fisheries Task Force will meet on October 3 from 10am to 3pm at SWRI in Sacramento. The Water Quality and Geomorphology Task Force will meet on October 15 from 9am to 3pm at the OFD in Oroville. The Terrestrial Task Force will meet on September 26 from 9am to noon at the OFD in Oroville.

## **IV. Study Deliverables and Implementation Updates**

### ***Methodology Updates – SP-F10, Tasks 1A, 1B, and 2D***

Brad Cavallo described the unsuccessful effort to relate straying rates to flows and temperatures due to the deficiency of the data set. He suggested that the coded wire tag (CWT) data would not be useful for statistical analysis because it is not clearly related to temperature fluctuations in October. He noted that release location appears to be more important than any other variables. Dave Olson described a change in emphasis for task 2D because since the flows don't change much in the low flow channel, a rigorous analysis is not warranted. Mike Mainz noted that redds can still have incubating embryos with no water over the top due to intragravel flows. Dave agreed and explained that their study methodology took a worst-case scenario to evaluate.

## **Reports**

### **SP-T8**

Dave Bogener distributed a draft final report for SP-T8, Project Effects on Non-Native Wildlife (Attachment 7) and provided a presentation to summarize the report (Attachment 8). He explained that essential and secondary habitat was determined by using WHR classifications. Dave concluded that the project doesn't impact native species found in the project area. Woody Elliott suggested that if a management action were designed to manage for red-legged frog however, a bullfrog removal program would be necessary. Terry Mills pointed out that the report would be useful as potential input for PM&Es.

### **SP-F8**

DWR distributed a Draft Report, SP-F8: Transfer of Energy and Nutrients by Anadromous Fish Migration (Attachment 9) and a summary of revisions to the SP-F8 Technical Report (Attachment 10). Terry Mills reported that no recommendations have been made due to the limitations of detection equipment for nutrients in the upper tributaries. Chuck Hanson expressed concern that the report did not include a recommendation but Terry suggested that the EWG should take the information and make a recommendation. Chuck suggested that reports should include opinions on whether the resource action that generated the report is a good idea. The EWG discussed how this might work for some of the studies but for the majority will be information to assist in the development of appropriate resource actions.

### **SP-F3.2, Task 3A**

Dave Olson distributed a Final Assessment of Potential Sturgeon Passage Impediments, SP-F3.2, Task 3A (Attachment 11) and described the difficulties in assessing a fish for which little is known regarding their swimming and jumping capabilities. He added that conclusions are speculative until further information is developed over time. Mike Meinz representing CDFG suggested that we don't know enough to fashion an action and should revisit the issue once additional information is developed. The EWG discussed if the impediment was structural or flow related and determined that until additional information is available, a recommendation could not be developed. The EWG suggested that the PDEA Team evaluate current and historic flows at Shanghai Bend to assist in determining how sturgeon may be impacted by project operations.

### **SP-W1**

Jerry Boles and members of his staff with DWR provided an update on the water quality studies. Jerry discussed preliminary results of pathogens in recreation areas (Attachment 12) and noted that while no action is indicated at this time, they will continue to sample and try to determine the differences between human and wildlife induced bacteria. Potential actions may include an educational program including posting information at popular locations and methods to scare wildlife away from high use areas.

### **SP-W1**

Scott McReynolds with DWR distributed a progress summary for Project Effects on Water Quality Designated Beneficial Uses for Surface Waters – Aquatic Toxicity (Attachment 13) and discussed preliminary results. He described a laboratory-induced pathogen that affected some results until the lab began filtering the samples. After review of the results, Chuck Hanson suggested that a way to evaluate the results would be to compare upstream tributaries with downstream samples to determine how the lake might be acting as a sink for some constituents.

### *SP-W3 & SP-W7*

Tom Bouillon with DWR provided an update on biochemistry measurements (Attachments 14 & 15) and indicated that methoprene byproducts were not detected in their samples. The EWG discussed the potential for contamination from mosquito spraying in the project area. Tom also reported on the literature review associated with SP-W9, evaluating natural processes such as riparian uptake of nutrients and re-oxygenation of water as it passes over riffles.

### *SP-W1*

Ryan Martin with DWR distributed a progress summary for Project Effects on Water Quality Designated Beneficial Uses for Surface Waters – Water Quality: Upper Feather River (Attachment 16) and reviewed preliminary results. He reported no problems with physical constituents in the upper Feather River with some criteria for metals exceeded at all stations tested. He explained that dissolved oxygen gets very low in the Oroville Wildlife Area ponds tested and some criteria for metals are also exceeded at all stations tested in the ponds.

### *SP-F15*

The report on SP-F15 will be deferred to the next EWG meeting.

## **VI. Next Steps**

The participants agreed that the next few EWG meetings would have essentially the same agenda as today as the EWG works through the information generated by the technical task forces. The next Environmental Work Group meeting is:

Date: October 29, 2003  
Time: 9:00 a.m. – 4:00 p.m.  
Location: Oroville Field Division

## **Action Items**

The following action items identified by the Environmental Work Group includes a description of the action, the participant responsible for the action, and due date.

**Action Item #E107:** Consider posting the draft narrative reports on the project web site.  
**Responsible:** DWR  
**Due Date:** October 29, 2003

**Action Item #E108:** Consider request to provide a list of the PDEA team to the collaborative members and define their role in the PDEA development process.  
**Responsible:** DWR  
**Due Date:** October 29, 2003

**Action Item #E109:** DWR and the consulting team will prepare a sample of the grouping concept using the Oroville Wildlife Area and will prepare a written description of the process followed to prepare the grouping.  
**Responsible:** DWR/Consulting Team  
**Due Date:** October 29, 2003